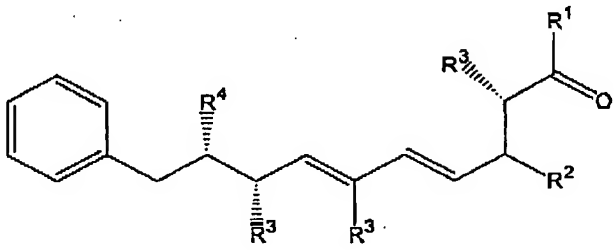
Application No. 10/070,302
Filed: May 1, 2002
TC Art Unit: 1641
Confirmation No.: 2837

AMENDMENT TO THE CLAIMS

1. (Currently Amended) A compound comprising one or more polypeptides providing a binding site of a monoclonal, polyclonal or recombinant antibody or a functionally active derivative or part thereof, wherein said compound is prepared using the group of formula (I) as a hapten, and said compound is capable of specifically binding to a compound comprising the group of ~~represented by the following~~ formula (I) represented as



(I)

and which is part of a toxin derived from a cyanobacterium, wherein group R^1 represents a halogen atom, $-OSO_3$, -OR' or $-NR'_2$ and group R^2 represents hydrogen, (C_1-C_4)alkyl, (C_1-C_4)alkoxy, (C_1-C_4)acyl, (C_1-C_4)acylamino, (C_1-C_4)carboxyaminoacyl, glutamidyl, or ~~2-aminoproprionamidly~~ 2-aminopropionamidyl,

or the groups R^1 and R^2 are connected to each other to form a cyclic moiety,

the groups R^3 which may be the same or different are each independently selected from the group consisting of hydrogen and (C_1-C_4)alkyl,

group R^4 represents (C_1-C_4)alkoxy,

the phenyl group may be substituted or unsubstituted, and further wherein the groups R' represent ~~independently from each~~

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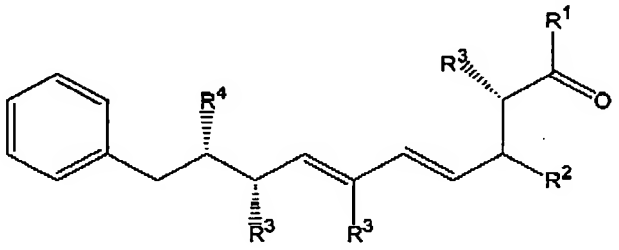
~~other~~ hydrogen, substituted or unsubstituted (C_1-C_4)alkyl or (C_1-C_4)acyl~~, when bound to nitrogen~~.

2. (Canceled)

3. (Previously Presented) The compound according to claim 1, wherein the groups R^3 each represent methyl and group R^4 represents methoxy.

4. (Currently Amended) ~~The~~ A compound ~~according to claim 1~~ comprising one or more polypeptides providing a binding site of a monoclonal, polyclonal or recombinant antibody or a functionally active derivative or part thereof, wherein said compound is prepared using the group of formula (I) as a hapten, and said compound is capable of specifically binding to a compound comprising the group of formula (I) represented as



(I)

and which is part of a toxin derived from a cyanobacterium, wherein group R^1 represents acylamino and group R^2 represents (C_1-C_4)acyl; or group R^1 represents glycyl or D-alanyl and group R^2 represents acetyl; or group R^1 represents $-NH_2$ and group R^2 represents glutamidyl or 2-aminopropionamidyl,

or the groups R^1 and R^2 are connected to each other to form a cyclic moiety,

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the groups R^3 which may be the same or different are each independently selected from the group consisting of hydrogen and (C_1-C_4)alkyl,

group R^4 represents (C_1-C_4)alkoxy,

the phenyl group may be substituted or unsubstituted, and further wherein the groups R' represent hydrogen, substituted or unsubstituted (C_1-C_4)alkyl or (C_1-C_4)acyl.

5. (Currently Amended) The compound according to claim 4, ~~wherein group R^1 represents glycyl or D-alanyl and group R^2 represents acetyl~~ wherein the groups R^3 each represent methyl and group R^4 represents methoxy.

6. (Canceled)

7. (Currently Amended) The compound according to claim 1 or claim 4, wherein the toxin is selected from the group consisting of mycrocystin and nodularin congeners.

8. (Currently Amended) The compound according to claim 1 or claim 4 which is a polyclonal, monoclonal or recombinant antibody or a functionally active derivative or fragment thereof.

9. (Currently Amended) A method for ~~the~~ preparation of the compound according to claim 1 or claim 4, said method comprising the steps of:

(a) providing ~~preparing~~ a compound containing a group represented by formula (I) as defined in claim 1 or claim 4;

(b) coupling the compound of step (a) to a carrier to form a conjugate;

(c) immunizing an animal with the conjugate obtained in step (b); and

(d) isolating the animal's blood, blood serum and/or spleenocytes.

10. (Previously Presented) The method according to claim 9, wherein the carrier is a polymeric substance.

11. (Currently Amended) The method according to claim 10, wherein the polymeric ~~carrier~~ substance is selected from the group consisting of polyethyleneglycol, polypeptides, proteins, polysaccharides or plastic supports.

12. (Currently Amended) The method according to claim 11, wherein the substance is a protein ~~carrier~~ and said protein is selected from bovine serum albumin, ovalbumin, cationised bovine serum albumin or horseradish peroxidase.

13. (Canceled)

14. (Currently Amended) A diagnostic kit containing the compound according to claim 1 or claim 4.

15. (Currently Amended) An affinity matrix containing the compound according to claim 1 or claim 4 coupled to a polymeric resin.

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16. (Currently Amended) A method for detecting a compound containing ~~the~~ a group represented by ~~the~~ formula (I) as defined in claim 1 or claim 4, said method comprising the steps of:

(a) providing a compound according to claim 1;

(b) mixing a second compound suspected of containing a group represented by formula (I) as defined in ~~with the compound according to~~ claim 1 or claim 4 to form a ~~reaction~~ mixture; and

(c) performing an assay that detects binding of the compound according to claim 1 to the second compound.

17. (Currently Amended) A method for concentrating a compound containing ~~the~~ a group represented by ~~the~~ formula (I) as defined in claim 1 or claim 4 from a fluid or for substantially decreasing the amount of a compound containing the group represented by ~~the~~ formula (I) in a fluid comprising the steps of:

(a) preparing the compound according to claim 1,

(b) coupling the compound obtained in step (a) to a polymeric matrix, and

(c) contacting the fluid with the polymeric matrix obtained in step (b).

18. (Previously Presented) The method according to claim 17, wherein the fluid is hemodialysis water, drinking water or water derived from rivers, lakes and oceans.

19. (Canceled)

20. (Canceled)

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21. (Canceled)

22. (Canceled)

23. (Canceled)

24. (Canceled)

25. (Canceled)

26. (Canceled)

27. (Canceled)

28. (Canceled)

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